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ABSTRACT

Two studies investigated some attitude scales' concurrent validity in order to test the view that ambivalence is a moderator of attitude-behavior relationships. A measure of ambivalence was obtained by using pairs of unipolar scales to assess positive and negative attitudes toward a number of objects. When attitudes were correlated with relevant behaviors, the ambivalence variable acted as a moderator by clearly distinguishing between more and less predictable groups of subjects. Thus despite the difference in methodology as well as content, both studies confirmed the major hypothesis that ambivalence toward an attitude object acts as an efficient moderator of predictor-criterion relationships. (Author/LH)

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Moderator Effects of Ambivalence in Attitude Measurement

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Traditional attitude scales do not differentiate between ambivalence and indifference. Kaplan (in press) proposed a technique to assess ambivalence by using two unipolar scales on which each object is rated for positive (A_{pos}), and for negative (A_{neg}) feelings. Responses to a set of items are scored to obtain net attitude ($A_{net} = A_{pos} - |A_{neg}|$), and ambivalence scores ($AMB = A_{pos} + |A_{neg}| - |A_{net}|$). Though the theoretical significance of ambivalence is evident, its usefulness must be demonstrated. This report regards ambivalence as a moderator of attitude-behavior relationships (Banas, 1964). To test this view two studies investigated some attitude scales' concurrent validity.

Procedure:

Study I (within-subjects design). In a 3-part questionnaire, parts 1 and 2 assessed attitudes toward four well-known personalities: two Democrats and two Republicans. Part 1 contained four bipolar, 7-point scales. Part 2 instructed subjects to differentiate their positive and negative attitudes by using four pairs of 4-point, unipolar scales (0 to + or -3). In part 3 subjects indicated on a bipolar scale whether they were liberal (+3) or conservative (-3). Subjects were 60 undergraduates at UC Davis.

Study II (between-subjects design). Two groups of 70 subjects, each, answered thirteen Likert items about cigarette smoking. Group 1 used 5-point, bipolar scales; group 2 responded to each item on two 4-point, unipolar scales. Through a self-report subjects were classified as never smoked (0), quit (1), or smokes now (2).

ABSTRACT

A measure of ambivalence was obtained by using pairs of unipolar scales to assess positive and negative attitudes toward a number of objects. When attitudes were correlated with relevant behaviors, the ambivalence variable acted as a moderator by clearly distinguishing between more and less predictable groups of subjects.

Results:

Study I. Attitudes toward Democrats and Republicans were obtained from part 1 by summing subjects' respective responses to the bipolar scales. A_{net} and AMB were similarly gained from part 2. Intercorrelations among these variables and self-rating were found for the entire sample, as well as for subjects with AMB = 0, and for those with AMB > 0. Table 1 presents the findings.

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Insert Table 1 about here

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Study II. In group 1 (using bipolar scales) the correlation between self-rating and attitude was 0.275 (df = 68; $p < .01$). In group 2 attitude-behavior correlations were obtained for two levels of AMB, following a median-split. Results appear in Table 2.

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Insert Table 2 about here

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Discussion:

Despite the differences in methodology as well as content, both studies confirm the major hypothesis: ambivalence toward an attitude object (as operationalized in this report) acted as an efficient moderator of predictor-criterion relationships. That is, ambivalence toward an object served as a predictor of the predictability of behavior from attitudes by identifying less vs. more predictable subsets of subjects. Furthermore, this increase in predictability could not be achieved through the consideration of ambivalence as an additional predictor: in none of the three analyses did a linear combination of ambivalence with Net Attitude increase the latter's validity significantly.

An inspection of the results shows, however, that the direction of this moderator effect is not independent of the underlying attitudes.

Attitudes toward Democrats. The two Democrats appearing in this study were favorably perceived by the majority of the subjects. When subjects were selected on the basis of their ambivalence scores, the resulting two groups had highly similar scores both with respect to their attitudes and their self-description. Those with non-zero ambivalence, however, were less predictable, probably because of their competing response tendencies.

Attitudes toward Republicans. The same sample of subjects was predominantly anti-Republican. Since their ambivalence scores were significantly related to Net Attitude ($r = .60$; $p < .01$), a selection on the former variable created two groups different from each other, not only with respect to ambivalence, but also with regard to their Net Attitude.[2] Among those with less negative attitudes toward the two Republicans predictability of the criterion became superior to such predictability in the other group. Thus, in addition to the specific moderating effect of ambivalence a more general effect also operates here, previously described by Fisher (1959) as the "twisted pear phenomenon." In this type of relationship the predictor itself serves as its own moderator, with the low scores providing less predictive information than the high ones.

Attitude toward smoking. A similar situation holds for the third analysis. The predominantly anti-smoking sample, when dichotomized on the basis of their ambivalence, separated into a more vs. less favorable group. Among those with highly negative attitudes toward smoking (and low ambivalence) the predictability of the criterion was inferior.

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[2]The difference between -4.27 and -1.67 (see Table 1) is significant at the .01 level, $t = 4.39$.

References

Banas, P. A. An investigation of transsituational moderators. Unpublished doctoral dissertation, University of Minnesota, 1964.

Fisher, J. The twisted pear and the prediction of behavior. Journal of Consulting Psychology, 1959, 400-405.

Kaplan, K. J. On the ambivalence-indifference problem in attitude theory and measurement: A suggested modification of the semantic differential technique. Psychological Bulletin, in press.

Table 1

Study I: Means and Intercorrelations

Variable	Entire Sample					AMB=0				AMB>0			
	$\bar{X}$	1	2	3	4	$\bar{X}$	1	2	3	$\bar{X}$	1	2	3
Democrats													
1. Attitude	1.35					1.04				1.54			
2. A_{net}	1.28	85**				1.39	97**			1.22	80**		
3. Self-rating	1.28	46**	50**			1.13	71**a	75**a		1.38	33*a	38*a	
4. AMB	1.83	14	-07	-03		--	--	--	--	--	--	--	--
N	60					23				37			
Republicans													
1. Attitude	-3.23					-4.06				-2.22			
2. A_{net}	-3.10	91**				-4.27	90**			-1.67	91**		
3. Self-rating	1.28	-54**	-53**			1.61	-32	-27		0.89	-64**	-66**	
4. AMB	1.27	43**	60**	-42**		--	--	--	--	--	--	--	--
N	60					33				27			

Note. --Decimal points have been omitted in the correlation matrices.

a Differences between 0.71 and 0.33 as well as between 0.75 and 0.38 are significant ($p < .05$ two-tail).

* $p < .05$

** $p < .01$

Table 2

Study II: Means and Intercorrelations

Variable	Entire Sample N=70				Ambivalence: less than median N=35				Ambivalence: more than median N=35			
	$\bar{X}$	1	2	3	$\bar{X}$	1	2	3	$\bar{X}$	1	2	3
1. A net	-4.03				-4.74				-3.31			
2. AMB	7.03	18			3.09	16			10.97	18		
3. Smoking Behavior	0.79	33**	26*		0.66	12	08		0.91	52**	35*	

Note. --Decimal points have been omitted in the correlation matrices.

* $p < .05$

** $p < .01$